

THE CLAIMS:

No claim amendments are proposed.

1. (Original) A compound based on hyaluronic acid, wherein alcohol groups of hyaluronic acid are esterified with rhein, as such or in derived form, or a salt thereof.
2. (Original) The compound according to Claim 1, wherein rhein esterifies at least 5 % of the esterifiable alcohol groups of hyaluronic acid.
3. (Original) The compound according to Claim 2, wherein rhein esterifies from 5 % to 50 % of the esterifiable alcohol groups of hyaluronic acid.
4. (Original) The compound according to Claim 3, wherein rhein esterifies from 5 % to 20 % of the esterifiable alcohol groups of hyaluronic acid.
5. (Original) The compound according to Claim 4, wherein rhein esterifies 10 % of the esterifiable alcohol groups of hyaluronic acid.
6. (Previously presented) Sodium salt of the compound according to Claim 1.
7. (Previously presented) A process for preparing a compound or a salt thereof according to Claim 1, which comprises reacting acid chloride of rhein, as such or in derived form, with hyaluronic acid.

8. (Original) The process according to Claim 7, wherein the acid chloride of rhein and the hyaluronic acid are in an amount such that a percentage ratio between the mmol of acid chloride of rhein and the meq. of the esterifiable alcohol units of hyaluronic acid is at least 5 %.

9. (Original) The process according to Claim 8, wherein said percentage ratio ranges from 5 % to 50 %.

10. (Original) The process according to Claim 9, wherein said percentage ratio ranges from 5 % to 20 %.

11. (Original) The process according to Claim 10, wherein said percentage ratio is 10 %.

12. (Previously presented) The process according to Claim 7, which comprises the following steps:

- a) preparing a suspension of hyaluronic acid in an aprotic non-polar solvent;
- b) adding acid chloride of rhein dissolved in an aprotic non-polar solvent and a hydrogen ion acceptor;
- c) leaving the mixture to stir at reflux for a time that is sufficient for the esterification reaction to take place; and
- d) evaporating off the solvent.

13. (Original) The process according to Claim 12, wherein said aprotic non-polar solvent of step a) is cyclohexane.

14. (Previously presented) The process according to Claim 12, wherein in step b), said hydrogen ion acceptor is NEt_3 .

15. (Previously presented) The process according to Claim 12 wherein in step c), the reaction is left at reflux for at least 20 hours.

16. (Previously presented) The process according to Claim 7, in which the acid chloride of rhein is obtained by means of a process comprising the following steps:

a') preparing a suspension of rhein in an aprotic non-polar solvent;

b') adding an amount of SOCl_2 so as to obtain a molar ratio between SOCl_2 and rhein of greater than 10;

c') leaving the reaction to stir at reflux in an inert atmosphere for a time that is sufficient for the rhein acid chloride to form; and

d') removing the solvent and the excess of unreacted SOCl_2 by distillation.

17. (Original) The process according to Claim 16, wherein said aprotic non-polar solvent of step a') is a chloride solvent.

18. (Original) The process according to Claim 17, wherein said chloride solvent is CH_2Cl_2 .

19. (Previously presented) The process according to Claim 16, wherein in step c'), the reaction is left at reflux for at least 3 hours.

20. (Previously presented) The process according to Claim 7, which further comprises a final step of purification.
21. (Original) The process according to Claim 20, wherein said purification step is carried out using a dialysis membrane.
22. (Previously presented) A pharmaceutical composition comprising the compound or a salt thereof according to Claim 1 in combination with suitable excipients and/or diluents.
23. (Original) The pharmaceutical composition according to Claim 22, which has a formulation suitable for loco-regional administration.
24. (Original) The pharmaceutical composition according to Claim 23, which is suitable for administration via intraarticular infiltration.
25. (Original) The pharmaceutical composition according to Claim 23, which is suitable for ophthalmic administration.
26. (Original) The pharmaceutical composition according to Claim 23, which is suitable for topical administration.
27. (Previously presented) The pharmaceutical composition according to Claim 22, in the form of an aqueous dispersion.
28. (Original) The pharmaceutical composition according to Claim 27, wherein said dispersion is in a buffer solution having a pH of 7.4.

29. (Previously presented) The pharmaceutical composition according to Claim 27 wherein the compound is in a concentration ranging from 0.1 % to 2 % w/v.

30. (Original) The pharmaceutical composition according to Claim 29, wherein the compound is in a concentration of 1 % w/v.

31. (Previously presented) A medicinal product for human or veterinary use, formed by a pharmaceutical composition according to Claim 22.

32. (Previously presented) A medical device for human or veterinary use, formed by a pharmaceutical composition according to Claim 22.

33. (Previously presented) A method of treating inflammatory diseases, which method comprises administering a compound or a salt thereof according to Claim 1, to a subject .

34. (Previously presented) The method according to Claim 33, wherein said inflammatory diseases are inflammatory diseases of the joints.

35. (Previously presented) A method for tissue repair, in which said tissue is cartilage or skin, comprising applying a compound- or a salt thereof according to Claim 1, to the tissue.

36. (Previously presented) A biomaterial comprising a compound or a salt thereof according to Claim 1.